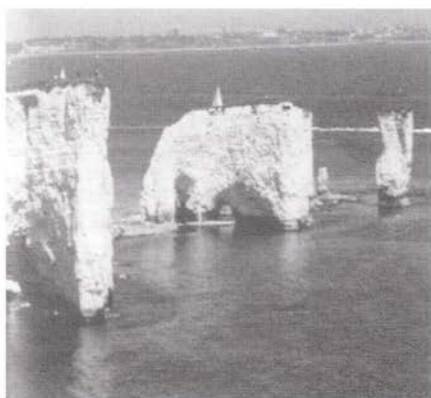


Every summer, I like to sail along the Purbeck coast to Weymouth and back, an ideal destination for a Poole-based Shrimper. This year I had to wait until the end of August for some stable weather, when high pressure finally established itself over Britain, generating quite strong northerly winds. Had I known how strong those winds would be on my outward passage, I might have had second thoughts!

As those of you who know this coast can confirm, the views from the water are spectacular. The Purbeck coastline is part of the Jurassic Coast, a UNESCO World Heritage Site because of its exceptional coastal scenery and varied geology. It includes rocks from the Triassic, Jurassic and Cretaceous periods of geological time. These make up the Mesozoic Era (the 'middle ages') of the earth's history, spanning a period 225–265 million years ago. To put this into perspective, Planet Earth is thought to have formed about 4,600 million years ago, life-forms (bacteria & algae) appeared 3,500 million years ago, and complex plants & animals developed about 570 million years ago. The Shrimper owner is a late-comer, emerging around 500,000 years ago.

I set off from the RMYC at 0830 on the morning of Thursday 23 August in what appeared to be benign conditions. As I sped past Old Harry's Rocks (see photo), I called Portland Coastguard to report my passage plan. They had earlier forecast northerlies at 5-6, easing down to 3-4, and they asked me about the local conditions. I was able to report a flat sea and around a force 4 from the north. Because of the forecast, I had put both reefs in the main, and at this stage seriously thought of taking one reef out. Fortunately, I resisted the temptation, and I am very glad I did!



Between Poole Harbour and Durlston Head, it is easy to see where the different layers of deposited rock meet the sea. The harder limestone and chalk have resisted the sea, as can be seen at Handfast Point (hard chalk) and at the prominences of Peveril Point & Durlston Head (hard limestone). Between these limestone and chalk promontories lie softer clays and sands. These have gradually been eroded away, creating Studland and Swanage Bays.

A passage to Weymouth

From Durlston Head/Anvil Point to St Aldhelm's Head, the cliff landscape is dominated by hard limestone, which has formed a barrier resistant to sea erosion. The sediments which formed these limestones were laid down in stable conditions on a quiet seabed, explaining their hardness and fine-grained uniformity. The many quarries along the coast are a source of high quality limestone, greatly sought after for buildings, pavements and harbour walls. At Dancing Ledge, much rock has been quarried and a deep water landing place has been created. The sea now washes in spectacular fashion over the exposed slabs of the ledge.

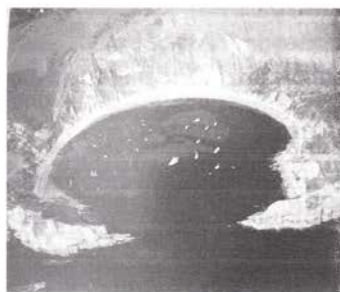
It was at this point that I started to be subjected to strong gusts off the land. These tended to funnel down the valleys in the Purbeck Hills, so it was to some extent possible to anticipate them. However, twice I was overpowered and had to take down the main (not so easy when one is single-handed), but was able to continue on jib alone making around four knots. (When I got back to Poole the next day, the yard staff told me that they had measured winds up to Force 9 in the Haven. They were so strong that the launch service had had to be suspended!)

At St Aldhelm's Head, the limestone cliffs towered above me, as I kept well inshore to avoid the worst of the famous tidal race over St Aldhelm's Ledge. The ledge stretches for four miles out to sea, and can cause the seas to throw up furious breaking waves, especially when the wind is against the tide. Just around the point is Chapman's Pool, a favourite anchorage for Poole Shrimpers. Those who make this passage always try to pass very close in, to avoid these overfalls.

The Purbeck Hills were formed when the continent of Africa 'collided' with Europe (approx 25 million years ago), causing Europe's rocks to buckle and twist, thrusting up mountain ranges like the Alps. Further north, this collision also created the South Downs and the Purbeck Hills. The rocks exposed on the surface are subjected to continuous weathering and erosion, giving us the spectacular coastline we see today. This erosion also creates stacks in the chalk cliffs (e.g. Old Harry) and caves in the limestone, creating arches (e.g. Durdle Door, see photo).



On reaching Kimmeridge, I noted that Clavell's Tower (a prominent landmark) has been moved back from the edge of the cliff, and is now being rebuilt by the Landmark Trust. There is an immediate change in the geology here, with crumbling cliffs composed of so-called 'blackstone', a dark and bituminous shale. Where these shale layers are harder, they are known as 'Kimmeridge Coal', which can be ignited. These deposits are actually a form of oil shale, and there is a nodding donkey near Kimmeridge village, with oil being extracted commercially.



The limestone cliffs form a barrier to the sea, but in places they have been breached. The seas then erode away the softer deposits between the limestone and a line of more resistant chalk. In this way, several horseshoe-shaped bays have been formed, such as Worbarrow Bay and the famous Lulworth Cove – see photo at left.

At Stair Hole, there is a good opportunity to see how the earth's movements have caused the rocks to fold into a variety of shapes – this is the famous 'Lulworth Crumple' – see photo at right. Here the limestone has been tilted, so that the strata are almost vertical.



With Weymouth now well in sight, I passed under White Nothe, a massive chalk cliff of Cretaceous chalk and sandstone. Soon after came the Osmington and Ringstead area, where seepages of oil can be found, coming from an oil deposit that is being breached by erosion. In 1826, the oil shale was ignited and smouldered for some years, hence the name 'Burning Cliff' on the maps.

And so I made my landfall after six hours of sailing and 26 nautical miles. Weymouth is a delightful town for an overnight stay. Its attractive harbour is the only safe deep-water haven along this coast, well protected by the land, and most especially from the west by the Isle of Portland. As I waited for the lifting bridge to pass into the inner harbour and marina, I was advised by several local yachtsmen that I should stay on the town quay (Cove Row) "where all the action would be"! However, I had had quite enough action for one day!

Check That Stern Gland!

They say that things always happen in threes, and this year in Poole we have had three boats that required their stern gland rubber hoses replaced – and those are only the ones I know about.

Failure can be pretty catastrophic, as the boat will fill with water in days rather than weeks and can result in flooded engines and interiors, large claims on insurance and lack of quality time on the water.

All the boats were of similar age – about 1990 - so the rubber could have been up to 17 years old. Please note, though, that rubber has no definite life and may fail earlier or later for no specific reason.

If I have now convinced you to go and check, I'm afraid it's more bad news. The rubber hose is situated behind the stern-gland stuffing box and can be seen by removing the inspection hatch under the cockpit grating. Seen is not quite the right word as it is buried in the skeg between the bilge pump suction hoses. To inspect it properly, you will need to remove the cockpit floor and engine box moulding which is held in place by many screws and selastic type sealant.

This job is not as bad as it first seems as once the sealant is cut though with a sharp knife, all that remains is to remove all the screws and disconnect the engine control panel and the bilge pump suction hose from the cockpit drain bilge pump. Check to ensure the outside of the hose is not perished or the inside has not collapsed. If it feels soft or squidgy, this is a sure sign replacement is due. Perhaps if the hose is more than five or six years old you should be considering replacement to be on the safe side.

If you need to replace it, the prop shaft will need to be withdrawn, so while you are at it you might as well replace the cutlass bearing and repack the stern gland. Don't forget to check the engine mounts at the same time.

These instructions only refer to a Mk1. To gain access to the stern gland in a Mk2 you have to remove a screwed panel, which may be much simpler. Due to press deadlines the photos only refer to a Mk1.

Graham Turner *Julie Kate (438)*
with thanks to Piglet (430) for some of the photos